The Honorable Ronald B. Leighton

IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

COLUMBIA MACHINE, INC., a Washington Corporation, Plaintiff, v. **BESSER COMPANY**, a Michigan Corporation, Defendant.	Civil Action No. 3:10-cv-05667-RBL **SECOND DECLARATION OF TIMOTHY FARLEY (INVALDITY) IN OPPOSITON TO COLUMBIA'S MOTION FOR A PRELIMINARY INJUNCTION** **Motion Noted for December 2, 2011** **Oral Argument Requested**

I, Timothy C. Farley, being conscious of the penalties of perjury, declare as follows:

1. I am the Corporate Director of Engineering for Besser Company USA. I have an engineering degree from Western Michigan University in electrical engineering. I have been an engineer for 20 years. I have been with Besser Company for 19 years working in the concrete product machine and mold design and operation business. I am familiar with the issues raised in this litigation and in the later-filed case brought by Columbia under Civil Action No. 3:11-cv-05268-RBL, and I am also familiar with various aspects of the concrete products machine and mold industry, having worked in it for almost 2 decades now.

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

2. This is the second declaration I am submitting in Opposition to Columbia's Motion for a Preliminary Injunction. The first one dealt primarily with Noninfringement and other issues. This declaration demonstrates the invalidity of claim 1 of U.S. Patent No. 6,177,039 (the '039 patent) and examines other issues, such as lack of irreparable harm, balance, and other issues bearing on Columbia's motion. All statements in this declaration are based either on my own personal knowledge or on my knowledge, skill, education, training, and experience as an engineer with almost 2 decades of experience in the concrete products machine and mold industry. To the extent my comments are based in whole or in part on my review of documents, those documents were kept in the usual course and scope of business by persons with knowledge of the recorded information, and with that knowledge recorded contemporaneously, and those documents reflect the sorts of facts, information, and data relied on by managers, directors, and engineers such as me in my field. I am not a lawyer, and I do not offer myself as an expert on patent law or corporate law. However, I have reviewed the six patents at issue in both *Columbia v. Besser* cases, and I am knowledgeable about the issues and technology involved in those cases.

3. Three patents are at issue in this case: U.S. Patent No. 5,807,591 (the '591 patent), U.S. Patent No. 6,177,039 (the '039 patent), and U.S. Patent No. 6,352,236 (the '236 patent). Although there are 14 claims in those three patents, Columbia has agreed to limit its case to four claims: claim 1 of the '591 patent, claim 1 of the '039, and claims 1 and 4 of the '236 patent, thus forgoing the opportunity to sue under the other 10 claims. True and correct copies of the three patents-in-suit were attached to the Complaint in this case and were excerpted and attached to my other declaration.

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

Invalidity of Claim 1 of the '039 patent

4. Claim 1 of the '039 patent reads as follows:

> A method for forming concrete products in a products forming machine having a frame and a feed drawer assembly mounted to said frame, the method comprising the steps of:
>
> mounting a mold assembly to the concrete products forming machine under the feed drawer assembly, the mold assembly including internal cavities and a top side;
>
> vertically moving the feed drawer assembly to a dispensing position located a proper distance above the top side of the mold assembly;
>
> locking the feed drawer assembly in the dispensing position; and
>
> dispensing a concrete material into the mold assembly cavities.

Initially, I would ask the Court to note that this claim is not enabled. It does not describe a fully functional method or enable a person of skill in the art to make concrete blocks in a concrete products machine. All of the components necessary to form "concrete blocks in a products forming machine" are not set forth in the claim. For example, there is no head assembly. There are no pallets. Also, the method stops when concrete material is dispensed into the mold cavities. The method does not therefore allow one to make multiple concrete blocks, as the preamble suggests. There is no discussion of how the concrete block is removed from the mold or what happens next.

5. Additionally, and more importantly, the claim terms "dispensing position" and "proper distance" are not defined anywhere in the '039 patent. Claim 1 has a limitation requiring vertically moving the feed drawer to a "dispensing position" a "proper distance" above a mold. But those terms are both subjective and will vary significantly depending on the machine used,

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

the mold used, the concrete material used, the kind of products being made, the machine cycling time, and a variety of other factors. There is no such thing as the proper distance to dispense concrete material above a mold. There are a range of distances, and the operator will make somewhat subjective judgments as to the right dispensing position, and the proper distance (of the feed drawer above the mold) for each application. The Court will look in vain for any discussion or teaching about these concepts in the patent. In short, the claim fails to describe a complete or operative method, and the claim is not enabled, because there is nothing about what the dispensing position should be in the patented invention or what the proper distance is between feed drawer and mold. In the absence of any such teaching or clarification, I view any prior art that dumps concrete material down into a mold below as covering these claim limitations, since "proper distance" and "dispensing position" vary and are partly subjective.

6. It is important for the Court to understand that there is nothing new or revolutionary about the technology *in any of the claims in the Columbia patents*. All limitations in every claim are found somewhere in the prior art. It is simply a matter of sifting through scores of references and prior art machines to find the ones that best anticipate the claims. Given enough time, I can present an invalidity argument for each asserted claim in the patents-in-suit. I do so with respect to claim 1 of the '039 patent here.

7. Both *Columbia v. Besser* cases relate generally to concrete products machines or concrete product forming machines (the terms are interchangeable here) and their molds. Concrete products machines are machines that produce concrete products, such as bricks, blocks, paving stones, edging stones, and other similar products. Modern versions of these machines are largely automated. The machines are part of elaborate mechanical assembly lines that mix

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

concrete material, pour the concrete material into molds, vibrate and compact that material, and strip or discharge the green (unhardened) blocks, bricks, or other products onto pallets that run along conveyors. The products are then transferred to kilns to be hardened.

8. I understand that U.S. patent law states that an inventor is not entitled to a patent (35 U.S.C. § 102) under a variety of circumstances, including if the invention was known or used by others in the United States or patented or described in a patent or printed publication in the United States or in a foreign country before the alleged invention by the patentee. In this case, Columbia is claiming a date of invention of February 7, 1994 (Plaintiff's Disclosure of Asserted Claims dated 1/5/11). Accordingly, evidence of prior invention by others before that date may render the claims of the '039 patent invalid. I also understand that the party defending against a preliminary injunction (here Columbia) need only raise a "substantial question" as to invalidity, unenforceability, or noninfringement. The clear and convincing evidence standard that might apply at trial apparently *does not apply in defending against a preliminary injunction motion.*

9. Nevertheless, it is my opinion, as a person of at least ordinary skill in the art of concrete product forming machines and molds, that claim 1 of the '039 patent is invalid even under a clear and convincing evidence standard, as being both anticipated and obvious. Attached as **Exhibit 1** to this declaration is a true and correct copy of U.S. Patent No. 3,107,410 (the '410 patent), issued to Davis on October 22, 1963. This 48 year old patent discloses all the features of claim 1 of the '039 patent:

Limitation in Claim 1 of the '039 Patent	**Comparable Structure Taught in '410 Davis Patent**
A method for forming concrete products in a products forming machine having a frame and a feed drawer assembly mounted to said frame, the method comprising the steps of:	The Davis patent relates to "concrete block molding machines," which plainly practice a method of forming concrete products. The patent discloses a concrete products forming

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

	machine with a frame and a feed drawer assembly mounted to the frame. The machine has a frame, which is denoted as **12** in the figures and specification. (Col. 2, lines 15-19, and throughout; Figs. 1 and 2). A feed drawer assembly, denoted as **32** in Fig. 4 and elsewhere, is mounted on and moves back and forth on the frame; the feed drawer sits on rollers that run alongside tracks **50** along a frame channel **54.** (Col. 3, lines 1-36; Figs. 3-5; claim 1). In the words of the patent, "frame plates **52** support the front track members **50** and the rear roller **66**, which in turn support the feed drawer **32** during its reciprocal movement between charging [getting concrete] and dispensing positions." (Col. 3, lines 27-31)
mounting a mold assembly to the concrete products forming machine under the feed drawer assembly, the mold assembly including internal cavities and a top side;	The Davis machine has a mold assembly **24** that is mounted to the frame below the feed drawer assembly **32**. (Col. 2, lines 30-40, Figs. 1-3, 8). It is absolutely clear that the mold box is mounted below the feed drawer: "In the discharging position of the feed drawer **32**, the chamber **38** is positioned ***above and in substantial vertical alignment with the mold 24."*** (Col. 3, lines 54-57). The mold has an open top and one or more cavities. (*Id.* at lines 30-40). In the art of the time, it was known that a mold cavity could be subdivided. But it is also reflected in the text of the specification, in several places including a description in column 2 which explains that *the bottom of the feed drawer slides across the top edges of the mold box.* (Col. 2, lines 43-54; claim 1).
vertically moving the feed drawer assembly to a dispensing position located a proper distance above the top side of the mold assembly;	The patent specifically teaches the vertical movement of the feed drawer relative to the mold box. (Col. 4, lines 6-39; Figs. 3-4; col. 8, lines 49-51). The feed drawer can be raised and lowered up and down *relative to the mold*, through rocker arms that push up or down on the tracks along which the feed drawer moves or "reciprocates." (Col. 4, lines 4-16; col. 8, lines 48-51; *see also* claim

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

	1). This vertical movement occurs as the feed drawer moves to or from the discharge position. It thus occurs as the feed drawer moves to a dispensing position.
locking the feed drawer assembly in the dispensing position	Depending on how the Court defines "locking," this patent locks the feed drawer in vertical position by cutting off power to the vertical movement mechanism, this locking it in place. (Col. 8, lines 53-68). The vertical movement of the feed drawer is constrained by having upper and lower switches that deactivate the coil controlling the vertical movement of the feed drawer if it is moving out of the dispensing position. (Col. 8, lines 52-68). These switches "prevent the raising and lowering of the feed drawer 32 beyond what is considered desirable limits." (*Id.* at lines 62-64). A second constraint comes from a governor that cuts off electricity to the rocker arms that move the feed drawer's tracks vertically to prevent the feed drawer from moving from its correct dispensing position. (Col. 9, lines 4-14).
dispensing a concrete material into the mold assembly cavities.	The Davis machine necessarily dispenses concrete material into the mold cavity or cavities and discusses this in several places. (Col 1, lines 16-19, col. 2, lines 45-46). It in fact uses the term "discharge position" almost 50 years before the Columbia patents do.

The '410 patent thus anticipates or renders obvious claim 1 of the '039 patent, alone or in combination with other references or machines discussed below.

10. **Exhibit 2** to this declaration is a true and correct copy of U.S. Patent No. 3,201,845 ('845 patent), issued to Strong on August 24, 1965, and entitled Concrete Slab Making Machine. **Exhibit 3** shows Fig. 3 from the '845 patent with the main, relevant structure elements labeled. In yellow is the vertically movable frame, with the movable feed drawer assembly in orange. In red are **brakes** that lock the frame into position, once it has moved to the desired

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

position vertically. This patent teaches each and every element of claim 1 of the '039 patent, way back in 1965. This is reflected in the following table:

Limitation in Claim 1 of the '039 Patent	Comparable Structure Taught in '845 Strong Patent
A method for forming concrete products in a products forming machine having a frame and a feed drawer assembly mounted to said frame, the method comprising the steps of:	The Strong patent, which can practice a method of forming concrete products (specifically concrete slabs), discloses a concrete products forming machine with a frame and a feed drawer assembly mounted to the frame. The machine has a frame, which is denoted as **23** in the figures and specification. (Col. 2, lines 13-15 and throughout; Fig. 3; *see also* **Exhibit 2**). A feed drawer assembly, denoted as **69** in Fig. 3 and elsewhere, is mounted to the frame by, and runs along, deck plates on the frame. (Col. 2, lines 43-54; Figs. 3, 5).
mounting a mold assembly to the concrete products forming machine under the feed drawer assembly, the mold assembly including internal cavities and a top side;	The Strong machine has a mold assembly **57** that is mounted below the feed drawer assembly **69**. This can be seen in the figure 2, where the mold box **57** is shown below the feed drawer assembly **69**. But it is also reflected in the text of the specification, in several places including a description in column 2 which explains that *the bottom of the feed drawer slides across the top edges of the mold box*. (Col. 2, lines 43-54; claim 1). The mold contains at least one cavity to receive concrete material.
vertically moving the feed drawer assembly to a dispensing position located a proper distance above the top side of the mold assembly;	The '845 patent explicitly teaches *vertical* movement of the feed drawer, which sits on the frame, through hydraulic cylinders. (Col. 3, lines 26-75). It speaks of energizing the hydraulic cylinders "to vertically relatively move the pressure plate 109 and frame." (Col. 3, lines 39-42). "By this arrangement, the frame may move up and down on the columns . . . ." (Col. 2, lines 10-12; claim 3). This movement allows a pressure plate 109 to push down on forming slabs, but it also sets a new vertical dispensing position for the feed

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

	drawer's interaction with the mold. (Col. 6, lines 31-47). Indeed, the patent teaches the stacking of multiple slabs in a pancake like stack, with the feed drawer moving up vertically each cycle to maintain the proper dispensing position over the mold. (*Id.*; col. 5, lines 57-63).
locking the feed drawer assembly in the dispensing position	Here the Strong patent comes very close to the '039 patent. The Strong patent using brakes to "lock[] the frame to the columns" along which the frame moves vertically. (Col. 4, lines 35-44; *see also* red brakes on **Exhibit 3**). The patent teaches brakes 40 to lock into place the frame on which the feed drawer moves. (*Id.*). States the patent, "By this arrangement, the frame 23 may move up and down on the columns 15 while maintaining exact parallelism with the floor surface 17." (Col. 2, lines 13-16). "The frame 23 may be LOCKED in any vertical position on the columns 15 by fluid pressure actuated brakes 40, best shown in FIGS. 7 and 8." (Col. 2, lines 13-16) (emphasis added).
dispensing a concrete material into the mold assembly cavities.	The Strong machine necessarily dispenses concrete material into the mold cavity or cavities and discusses this in several places. (Col 1, lines 16-19, col. 6, lines 25-30). It in fact uses the term "discharge position" almost 50 years before the Columbia patents do.

These two patents show both that an invalidity challenge to claim 1 of the '039 patent is likely to succeed, and – more generally – how old the technology is at issue in this case. Columbia has literally repackaged decades old stuff and somehow gotten patents on it.

11. I am personally aware of an older Besser concrete products machine called the Versapac that Besser made and offered for sale at least as early as 1989. For example, the machine was publicly shown at the Bauma Trade Fair that took place April 10-16, 1989. Attached as **Exhibit 4** are several pictures or diagrams of the Versapac, as well as an article

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

about the Bauma Trade Fair in April of 1989. In one picture, I have colored the relevant elements. A hydraulic cylinder (green) lifts the feed drawer (yellow) up and down to adjust to different mold heights. The machine also had a frame, and a mold box. The mold box and the feed drawer were both attached to the frame. The mold box could have either a single cavity or multiple cavities. The mold box was mounted under the feed drawer. As noted, the feed drawer was moved vertically into a dispensing position. The feed drawer could then be *locked* into position by moving a clamping bar (blue in another picture) into engagement with a clamping block (red), creating a bar lock that held the feed drawer in its dispensing position. The Versapac thus contained each and every limitation of claim 1 of the '039 patent and anticipates that claim.

12. Other prior art machines I am personally aware of include German-made OMAG brand Model 140/90 paving machines. We are aware of one machine that was installed at the Anchor Concrete Company in Philipsburg, New Jersey in 1988 and was running in New Jersey until recently. A second machine was installed in 1990 at a company called Paver Systems in Tampa, Florida. True and correct pictures of the OMAC machine are attached to this declaration as **Exhibit 5**. The OMAC machine again meets all limitations of claim 1 of the '039 patent. It has a frame, a feed drawer assembly mounted to the frame, and a mold box with one or more cavities mounted to the frame under the feed drawer. Hydraulic cylinders, colored yellow in some pictures, raise and lower a feed box (colored green or blue in some pictures). The feed box can be vertically raised to a dispensing position (a subjectively proper distance) above the mold assembly. A mechanism is provided to *lock* the feed drawer in a dispensing position. Specifically, the OMAC machine has a locking collar, which clamps to a threaded rod, locking

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

the feed drawer assembly in a dispensing position. The OMAC machine again fully anticipates claim 1 of the '039 patent.

13. I have provided four different examples of prior art, some predating the '039 patent by decades. Each instance of prior art is potentially an anticipating reference by itself. Additionally, I understand that the four prior art patents can be combined with each other, and with other art of record in this case (Doc. No. 31) (Revised Preliminary Noninfringement and Invalidity Contentions) (incorporated by reference), in any combination to make obviousness arguments under 35 U.S.C. § 103. I understand that there are several tests for obviousness. One is whether the claim at issue reflects the "predictable use" of prior art elements. In this case, the four examples of prior art I discuss are so close to claim 1 of the '039 patent, that it is predictable to get to that claim. The central idea of claim 1, to move a feed drawer vertically and lock it in position over the mold, is literally featured in the prior art and its extension to the other elements of claim 1 requires essentially nothing.

14. Put another way, a person of skill in the relevant art back in January or February of 1994, at the time or just before the relevant priority date (2/7/94), could and would readily come up with claim 1 of the'039 patent as at most a predictable variation of the prior art I have provided. The references I provide teach the value of vertically moving the feed drawer to keep it above the top of the mold box during "discharge," which is the central purpose of vertically moving the feed drawer in the patent (e.g., to allow adjustment of the feed drawer to a variety of mold shapes and types). In that respect, the prior art I have described also describes the scope of the prior art, which includes a frame, mounting of the mold with one or more cavities to the frame under the feed drawer (in the discharge position), vertical movement of the feed drawer,

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

locking of the feed drawer through a host of mechanisms known in the prior art, and discharge of the concrete into the mold. In short, the prior art I have provided renders claim 1 of the '039 patent obvious on a clear and convincing basis, and certainly creates the "substantial question" needed to defeat a preliminary injunction.

15. In this case, the relevant art at issue is the art of concrete products machine and mold design and operation. A person of ordinary skill in this art would ordinarily be a person with a 4 year engineering degree and at least 4-5 years of experience in the art. Alternatively, a person with over 10 years of hands-on experience in the design and operation of concrete products machines and molds can be a person of ordinary skill in the relevant art. As noted above, I am at least a person of skill in the art pertaining to this case, and am therefore qualified to offer the opinions that I offer in this and other declarations.

16. On the issue of irreparable harm, I want to add that the elements at issue in the four asserted claims are minor elements: cylindrical pins, holes in the bottom facing surfaces of the side walls, and a brake on any means of vertically moving the feed drawer on an accused machine. (*See* Claims). These minor components must be worth no more than $1,000 in a final assembled machine worth over $500,000. Besser's SERVOPAC does not meet all the limitations of the four asserted claims. But even if it did, it would make no sense to enjoin the sale of a $500,000 machine because of a dispute about a couple small pins, some holes, and a break. Neither do those minor features of the patents-in-suit drive any sales. I am unaware of a Besser customer ever requesting alignment pins and holes as an explicit, valuable feature, or asking for a locking device on the vertical movement of a feed drawer. In my experience, customers would not care about those features.

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200

17. Finally, if the Court were somehow to conclude that Besser has a substantial likelihood of infringing any of the asserted claims at trial, the Court should consider whether Besser can do an easy design around, since the patented features are, again, fairly incidental to the SERVOPAC and its molds.

Signed in New London County, Connecticut, based on personal knowledge, and declaring the previous statements to be true and correct under penalties of perjury.

Dated: November 27, 2011

Timothy Farley

Merchant & Gould P.C.
701 Fifth Avenue, Suite 4100
Seattle, WA 98104
Telephone: (206) 342-6200